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MARK RESOURCES INC MARINA DEL REY CA

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RECOMMENDATIONS FOR UPGRADING RFSS TO MEET NEAR-TERM REQUIREMEN-ETC(U)

JUL 78 R L MITCHELL

DAAK40-78-C-0031

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RFSS

RECOMMENDATIONS FOR UPGRADING RFSS  
TO MEET NEAR-TERM REQUIREMENTS

TECH NOTE 105-048 ✓

20 JUL 78

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9) Technical note,

6) RECOMMENDATIONS FOR UPGRADING RFSS TO MEET  
NEAR-TERM REQUIREMENTS.

10) R. L./Mitchell

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11) 20 July 1978

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14) MRI 148-28, MRI-TN-105-048

After reviewing the plans for the near term it appears that several more taps are going to be required for the tapped-delay line modulator. To accommodate a range resolution of .02  $\mu$ sec (10 ft) we must space the taps by .01  $\mu$ sec (5 ft) for the extended target simulation. If the target is 60 ft in length, it will encompass 12 taps plus about 4 more for "end effects". It is therefore recommended that the tapped-delay line modulator be extended to 16 taps. No additional digital processing hardware would be required for extended targets.

For clutter we would require 32 taps and modulators on 3 channels if the clutter were independent from range gate to range gate. However, additional processing hardware would be required to generate the modulation signals, namely several (~ 4) AP120B's. It is therefore recommended that a simpler form of clutter be implemented that is consistent with the hardware for the extended target simulation.

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